Application No. 10/766,505

Response dated January 10, 2007

Reply to Office Action of September 10, 2007

Remarks:

Claim 27 has been rejected under 35 U.S.C. §112, second paragraph. Claim 27 has been canceled, thereby mooting this rejection.

Claims 26-33 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,089,182 to Hama (*Hama*).

The claims have been amended to insure that they do not literally read on *Hama* while retaining the language that overcomes the rejections made prior to the filing of the RCE. *Hama* was cited because it included, in a plasma processing apparatus, an inductive circuit element that incidentally possessed geometry that the Examiner considered to anticipate language in Applicant's claims. This inductive element was provided by *Hama* to energize a gas passing through passages in a shower head. The element has a zig-zag configuration to accommodate the hole pattern in the shower head, with small cutouts aligned with the holes. The inductive element of *Hama* does not generate RF magnetic fields that extend into a processing space within a chamber to inductively energize a plasma in the chamber and to create a non-uniform plasma density distribution in the chamber. Particularly, *Hama's* apparatus does not produce a segmented plasma having an alternating high and low power distribution.

The replacement claims parallel the previous claims but have been rewritten in means-plusfunction form to ensure that the Examiner must give patentable weight to a function of the present
invention that the subject matter of the cited prior art references does not possess. Claim 34 recites
"means for coupling RF energy from the RF power source into the plasma processing space within the
chamber in a spatially distributed ring, around and centered on the axis, in an alternating high and low
plasma density distribution." Claim 40 recites "means for coupling RF energy from the RF power source
into a plasma a processing space within the chamber in a spatially distributed ring in an alternating high
and low plasma density distribution". Claim 47 recites "means ... for coupling RF energy through the
dielectric window to form a plasma in a chamber having an alternating ring of high and low power
density segments in the chamber". Neither *Hama* nor any of the references previously cited in this
application discloses such means.

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In each of both the independent and dependent claims, previously recited structural recitations

have been rewritten to link them to, and limit, the recited means. This combination of structure and

function is nowhere disclosed or suggested by the prior art.

Accordingly, it is submitted that the pending claims are neither anticipated nor obvious over the

cited references.

It is submitted that the application is in condition for allowance. An early allowance is

respectfully requested. If the Examiner finds any errors in the claims, it is requested that she call the

counsel identified below to resolve the errors.

If any charges or credits are necessary to complete this communication, please apply them to

Deposit Account 23-3000.

Respectfully submitted,

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10